

ABSTRACT

An objective of the present invention is to provide electrophoretic separation methods and devices that enable the various features of a substrate surface that comes in contact with an electrophoresis medium to be controlled.

The present invention provides methods for electrophoresing substances, which comprises the steps of:

- (a) adding a substance to be analyzed to an electrophoresis medium retained in a substrate, whose surface that has come in contact with the electrophoresis medium has been coated with a polymer membrane; and
- (b) adding electrophoretic pressure to the electrophoresis medium.

For example, the use of a plasma-polymerized membrane allows the formation of a membrane with homogeneous quality and thickness on the surface of an arbitrary shape. In addition, desired characteristics can be conferred on the surface through selection of monomeric substances. Protein adsorption onto micro-chips can be effectively prevented as well.